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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/482,263	01/13/2000	Gunter Halmschlager	P18720	6753

7055

7590

09/16/2003

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RESTON, VA 20191

EXAMINER

HUG, ERIC J

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/482,263	Applicant(s) HALMSCHLAGER ET AL.	
	Examiner Eric Hug	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13, 15-37 and 39-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-21, 25-37, 39-44 and 47-50 is/are allowed.
- 6) ☒ Claim(s) 2-13, 15, 16, 22-24 and 46 is/are rejected.
- 7) ☒ Claim(s) 17, 18 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

The following is in response to the amendment filed on June 13, 2003.

Claim Objections

Claim 45 is objected to because of the following:

The claim is for “A sealing belt for a dryer in a machine for supporting a material web...”.

The last limitation of the claim is “wherein said fluid impermeable screen is structured as a sealing belt for a dryer device to support a material web.” This last limitation appears to be redundant.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 2-13, 15, 22-24, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chalon (US 1,925,917). Chalon discloses endless press belts for a press section of a paper making machine, whereby the belts may be made of a metal web or metal sheets in conjunction with an impregnating material such as rubber. The metal web would provide reinforcement for the rubber material. The belts must be perforated to provide drainage passages for water.

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Therefore, such a belt is rendered impermeable prior to perforation. The intermediate structure of the belt reads on the claimed invention.

With regards to the shape of the cross section of the metallic wires used in a metal web, a rounded cross-section is conventionally chosen, and is the shape of choice in Chalon as evident from the drawings. Other shapes of wires would be obvious in view of *In re Dailey*, 149 USPQ 47 (CCPA 1976) (change in form or shape is an obvious engineering design).

With regards to claim 46, the last limitation "wherein said fluid impermeable screen is structured as a sealing belt for a dryer device to support a material web", is a statement of intended use which does not further limit the structure of the belt over that of Chalon.

2. Claims 2-6, 13, 15, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majaneimi (US 4,482,430) discloses a compressible endless press band that is impermeable to water for use in a press in a paper machine. The press band (2) comprises a polymeric material and a support structure (15) for absorbing longitudinal and transverse forces, which can be made of steel (see column 4, lines 10-22). This would be obvious to one skilled in the art to be a support having an interconnecting structure of metallic wires, threads, or the like oriented in both the longitudinal and transverse directions, i.e. as a wire mesh or screen.

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 5,506,033) in view of Romanski (US 4,224,372), and further in view of Hose et al (US 2,718,791) or MacBean (US 3,523,867) or Peterson (US 3,652,390).

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Smith discloses a drying fabric for a paper machine having edge seals, formed by impregnating the fabric at the edges with a polymeric coating and forming beads (beadlike protuberances) along the same edges. The coating renders the fabric impermeable at the edges. Unlike the present invention, the fabric of Smith is made of a synthetic material, not a metallic material.

However, it is well known in the art that drying belts used in a paper making machine can be comprised of a woven metallic structure. Romanski is cited to exemplify that woven metal belts are well known to be used as either forming fabrics or drying fabrics. Furthermore, Hose, MacBean, and Peterson all teach edge coating of metal forming fabrics for protecting the edges from wear. Therefore, at the time of the invention it would have been obvious to one skilled in the art to edge coat a drying fabric comprised of a metallic support structure thus filling at least some of the interstices to protect the edges of the drying fabric from wear in the same manner as taught by Smith. This obviousness is exemplified further by the fact that Smith cites Hose, MacBean, and Peterson as being known disclosures of treating the edges of metallic fabrics.

Allowable Subject Matter

Claims 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 45 would be allowable if rewritten to overcome the objection given above.

Claims 19-21, 25-37, 39-44, and 47-50 are allowed.

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The primary reasons for allowable subject matter of the claimed belt comprising a sheet of metallic long-chain supports or a woven metal screen and a filler material rendering the belt fluid impermeable, are the inclusion of either of the following additional features which structurally defines the belt over the prior art:

The surface of the belt comprise the long-chain supports.

Beadlike protuberances comprise the metallic long-chain supports.

The weaving density of the woven structure is adjustable based on a desired surface requirement.

A portion of the filling is scraped from a surface of the filled sheet to expose the metal filaments.

The prior art also does not disclose or suggest a sealing belt for a dryer in a web producing machine having metallic long-chain supports or a woven metal screen and having a filler material rendering the belt fluid impermeable.

With respect to the amended claims and to Applicant's arguments, the Examiner recognizes that the claims in the present application recite a combination of features, and the basis for patentability of these claims is based upon the totality of the features recited therein.


New grounds of rejection have been presented, therefore this action is non-final.

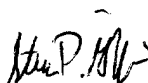
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 703 308-1980. The examiner can normally be reached on Monday through Friday, 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0651.


jeh


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
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